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#### UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte XIAODONG JIN, SEHAT SUTARDJA, LAWRENCE TSE, and KING CHUN TSAI

Appeal 2009-004129 Application 10/811,031 Technology Center 2800

Before JAMES D. THOMAS, MAHSHID D. SAADAT, and CARL W. WHITEHEAD, JR., Administrative Patent Judges.

WHITEHEAD, JR., Administrative Patent Judge.

DECISION ON APPEAL<sup>1</sup>

as recited in 37 C.F.R. § 41.52, begins to run from the "MAIL DATE" (paper delivery mode) or the "NOTIFICATION DATE" (electronic delivery

mode) shown on the PTOL-90A cover letter attached to this decision.

<sup>&</sup>lt;sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing,

# STATEMENT OF THE CASE

Appellants seek our review under 35 U.S.C. § 134 of the Examiner's final decision rejecting claims 1-3, 5, 8-11, 13, 16-19, 21, 24-26, 28, 31, 32, and 34.<sup>2</sup> (Appeal Brief 7). We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

We affirm.

Claim 1, which further illustrates the invention, follows:

1. A low noise amplifier, comprising:

a radio frequency input; and

an electrostatic discharge protection circuit including,

a pair of diodes each having a first and a second terminal;

a first diode of the pair having a first terminal coupled to the radio frequency input and a second terminal directly coupled to a first supply;

a second diode of the pair having a second terminal coupled to the radio frequency input and a first terminal directly coupled to the first supply; and

a separate electrostatic discharge clamp directly coupled between a high voltage supply and a low voltage supply so as to provide a discharge path there between during an electrostatic discharge event;

the electrostatic discharge protection circuit operable to shunt electrostatic discharge current during positive and negative electrostatic discharge events away from the radio frequency input and through the first supply.

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<sup>&</sup>lt;sup>2</sup> Appellants argue the patentability of claims 6, 7, 14, 15, 22, 23, 29, 30, 35, and 36. Appeal Brief 11-15. However, these claims were objected to by the Examiner. *See* Final Rejection 11-12; Answer 12-13. Notwithstanding Appellants' arguments, this matter is not before us since we lack jurisdiction over petitionable matters. *See*, *e.g.*, MPEP § 706.01 ("[T]he Board will not hear or decide issues pertaining to objections and formal matters which are not properly before the Board."); *see also* MPEP § 1201 ("The Board will not ordinarily hear a question that should be decided by the Director on petition . . . .").

Appellants appeal the following rejections:

Claims 1-3, 5, 8-11, 13, and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jenkins (US 6,738,248 B1; May 18, 2004), Duclos (US 5,994,760; November 30, 1999), and Rutfors (WO 02/05380 A1; January 17, 2002). Answer 3-8.

Claims 17-19, 21, 24-26, 28, 31, 32, and 34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jenkins and Duclos. Answer 8-12.

Rather than repeat Appellants' arguments or the Examiner's positions in their entirety, we refer to the Appeal Brief (filed April 3, 2008), the Reply Brief (filed October 6, 2008), and the Answer (mailed August 5, 2008) for their respective details. In this decision, we have considered only those arguments actually made by Appellants. Arguments which Appellants could have made but did not make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii) (2008).

#### **ISSUE**

Does the combination of Jenkins, Duclos, and Rutfors disclose a low noise amplifier having an ESD clamp coupled between high and low voltage supplies wherein the input to the low noise amplifier is a radio frequency?

# PRINCIPLES OF LAW

"A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant." *In re Kahn*, 441 F.3d 977, 990

(Fed. Cir. 2006) (citation omitted) (internal quotation marks omitted). *See also In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004) (noting that merely disclosing more than one alternative does not teach away from any of these alternatives if the disclosure does not criticize, discredit, or otherwise discourage the alternatives).

The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art. *See Kahn*, 441 F.3d at 987-88; *In re Young*, 927 F.2d 588, 591 (Fed. Cir. 1991); *In re Keller*, 642 F.2d 413, 425 (CCPA 1981). The Examiner can satisfy this test by showing "some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (quoting *Kahn*, 441 F.3d at 988).

# **ANALYSIS**

Appellants argue that the Examiner misunderstood the import of Appellants' arguments with respect to Jenkins' Figure 3. Reply Brief 1. It is Appellants' position that Jenkins' Figure 3 negates the Examiner's reasonable rationale for combining Duclos' ESD clamp with Jenkins' circuit. *Id.* Appellants conclude that Jenkins knew about the technique of using an ESD clamp directly coupled between a high voltage supply and a low voltage supply but consciously rejected the configuration, therefore teaching away from the Examiner's combination of Jenkins and Duclos. Reply Brief 1-2; *see also* Appeal Brief 9.

However, Appellants' conclusion that Jenkins teaches away from employing Duclos' clamp is merely speculation because Jenkins does not discredit or discourage Duclos' ESD clamp configuration. *See Kahn*, 441

F.3d at 990. The Examiner relied upon Duclos' ESD clamp to modify Jenkins for the purpose of providing bidirectional protection to Jenkins's circuit, thus establishing a prima facie case of obviousness. *See* Answer 5. Therefore, we disagree with Appellants' assertion that the Examiner did not carry out his burden of establishing a prima facie case of obviousness with respect to the Jenkins and Duclos combination.

Appellants argue that the Examiner merely stated the advantages of a particular limitation, i.e., merely noted that adding ESD protection would be desirable to prevent damage to an amplifier, and therefore failed to carry out his burden of establishing a prima facie case of obviousness with respect to the asserted combination of Jenkins and Rutfors. Appeal Brief 10.

However, the Examiner stated that it would have been obvious to one skilled in the art to incorporate the protection of Jenkins into the device of Rutfors to provide ESD protection to a wireless circuit, thus preventing Rutfors's low noise amplifier from being damaged. *See* Answer 4. Thus, Examiner provided a rational foundation to support his obvious rejection. *See KSR*, 550 U.S. at 418. Therefore, we do not find Appellants' arguments to be persuasive.

# **DECISION**

The Examiner's rejections of claims 1-3, 5, 8-11, 13, 16-19, 21, 24-26, 28, 31, 32, and 34 are sustained.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1) (2009).

# ORDER <u>AFFIRMED</u>

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